

1 **In the Claims:**

2 Claims 1, 4-8, 12, 17, 27 and 33 are amended.

3 Claims 2, 3, 22, 28, 30 and 31 are canceled

4 Claims 1, 4-17, 20, 21, 23-27, 29, and 32-37 remain pending and are listed
5 below:

6

7 1. (Currently Amended) A command line utility embodied in one or
8 more computer-readable storage media, the command line utility comprising:

9 a command schema including one or more commands for engaging, from a
10 management station on a network, an operating system on at least one selected
11 target station accessible over the network enabling at least one of retrieval of
12 management information from and initiation of a management service available
13 through an object model target schema recognized by the at least one selected
14 target station accessible over the network, the command schema comprising:

15 an alias class which defines a command template, each alias of the
16 alias class representing a single command;

17 a verb class as a subclass to the alias class, each instance of the verb
18 class representing a behavior available through an alias;

19 a format class as a subclass to the alias class, each instance of the
20 format class representing a list of properties that will be returned through
21 processing an alias; and

22 a connection class as a subclass to the alias class, each instance of
23 the connection class providing parameters used through an alias when
24 establishing a connection to a target namespace within the target schema;

1 an interactive user interface configured to receive the one or more
2 commands in the command schema from a user of the management station,
3 allowing the user to formulate via the command line utility an instant request for at
4 least one of management information and management services and communicate
5 a response of the at least one selected target station to the user; and

6 an object model command schema to define a mapping between the one or
7 more received commands in the command schema and the object model target
8 schema and interpret the one or more commands from the command schema into a
9 management command operable to cause one of the retrieval of the management
10 information from and the initiation of the management service on the at least one
11 selected target station.

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13 2. (Canceled).

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15 3. (Canceled).

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17 4. (Currently Amended) A command line utility as recited in claim
18 [[3]] 1, the command schema further comprising:

19 a parameter class as a subclass to the verb class, each instance of the
20 parameter class representing parameters accepted by a verb from the verb class.

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22 5. (Currently Amended) A command line utility as recited in claim
23 [[3]] 1, the command schema further comprising:

1 a property class as a subclass to the format class, each instance of the
2 property class representing property values for properties within a list of
3 properties.

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5 6. (Currently Amended) A command line utility as recited in claim
6 [[2]] 1, the command schema further comprising:

7 a localized string class, each instance of the localized string class providing
8 language-specific text relevant to an alias.

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10 7. (Currently Amended) A command line utility as recited in claim
11 [[2]] 1, the command schema further comprising:

12 a qualifiers class, each instance of the qualifiers class representing
13 qualifiers to be applied to elements of an alias.

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15 8. (Currently Amended) A command line utility as recited in claim
16 [[2]] 1, the command schema further comprising:

17 a see-also association, each instance of the see-also association
18 providing associations to aliases which are related to an alias.

19

20 9. (Original) A command line utility as recited in claim 1, wherein the
21 one or more commands are organizable into role-oriented namespace, such that
22 commands related to particular administrative tasks are found together.

1 10. (Original) A command line utility as recited in claim 1, wherein the
2 command schema is extensible to permit the generation of additional commands to
3 be added to the one or more commands.

4

5 11. (Original) A command line utility as recited in claim 1, wherein the
6 command schema is configurable to permit reconfiguration of the one or more
7 commands.

8

9 12. (Currently Amended) A command line utility as recited in claim 1,
10 the command schema further comprising:

11 ~~an alias class to define alias instances, each alias instance representing a~~
12 ~~single command;~~

13 ~~a verb class to define verb instances, each verb instance representing~~
14 ~~behavior available through an alias instance;~~

15 a parameter class to define parameters accepted by a verb instance;

16 ~~a format class to define format instances, each format instance having a list~~
17 ~~of properties to be displayed through an alias instance;~~

18 a property class to define property instances, each property instance
19 representing a property value from a property list;

20 ~~a connection class to define connection instances, each connection instance~~
21 ~~representing connection parameters used by an alias instance to establish a~~
22 ~~connection to the target schema;~~

23 a qualifier class to define qualifier instances, each qualifier instance
24 representing constraints on elements of an alias instance;

1 a localized string class to define localized string instances, each localized
2 string instance representing a text localization for translating text into a localized
3 language; and

4 a see-also association to associate an alias instance with other related alias
5 instances.

6

7 13. (Original) A command line utility as recited in claim 1, wherein the
8 target schema comprises a WMI object model.

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10 14. (Original) A command line utility as recited in claim 1, wherein the
11 command schema is a plurality of command schemas, each command schema
12 representing an instant set of one or more commands.

13

14 15. (Original) A command line utility as recited in claim 1, wherein the
15 command schema resides on a local machine and the target schema resides on one
16 or more remote machines.

17

18 16. (Previously Presented) A management command system operable to
19 retrieve management information and initiate a management service available
20 through an object model target schema recognized by at least one selected target
21 station accessible over a network, the management command system comprising:

22 an interactive user interface configured to receive one or more commands
23 in the command schema formulated as an instant request by a user at a
24 management station for engaging an operating system on at least one selected

1 target station and communicate a response of the at least one selected target station
2 to the user; and

3 a control schema including the one or more commands to be received by
4 the interactive user interface, including:

5 an alias class to define alias instances, each alias instance
6 representing the at least one command;

7 a verb class to define verb instances, each verb instance representing
8 behavior available through an alias instance;

9 a parameter class to define parameters accepted by a verb instance;

10 a format class to define format instances, each format instance
11 having a list of properties to be displayed through an alias instance;

12 a property class to define property instances, each property instance
13 representing a property value from a property list;

14 a connection class to define connection instances, each connection
15 instance representing connection parameters used by an alias instance to establish
16 a connection to the target schema;

17 a qualifier class to define qualifier instances, each qualifier instance
18 representing constraints on elements of an alias instance;

19 a localized string class to define localized string instances, each
20 localized string instance representing a text localization for translating text into a
21 localized language; and

22 a see-also association to associate an alias instance with other related
23 alias instances.

1 17. (Currently Amended) A management application embodied in one or
2 more computer-readable storage media, the management application comprising:

3 a set of commands generated by an object model command schema to
4 operate against an object model target schema of at least one selected target, the
5 command schema defining a mapping between the set of commands and the target
6 schema, and wherein the command schema is configurable to permit
7 reconfiguration of individual commands in the set of commands; and

8 an interactive interface utility configured to allow a user to formulate an
9 instant request and receive the user command to facilitate implementation of
10 individual commands within the set of commands, wherein the interactive
11 interface utility includes at least one of:

12 a command line interface utility configured to receive textual entry
13 of the user command; and

14 a graphical user interface utility.

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16 18. (Canceled).

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18 19. (Canceled).

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20 20. (Original) A management application as recited in claim 17, wherein
21 the set of commands is organizable into role-oriented namespace, such that
22 individual commands related to particular administrative tasks are found together.

1 21. (Original) A management application as recited in claim 17, wherein
2 the command schema is extensible to permit the generation of additional
3 commands to be added to the set of commands.

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5 22. (Canceled).

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7 23. (Original) A management application as recited in claim 17, wherein
8 the command schema comprises:

9 an alias class to define alias instances, each alias instance representing a
10 command within the set of commands;

11 a verb class to define verb instances, each verb instance representing
12 behavior available through an alias instance;

13 a parameter class to define parameters accepted by a verb instance;

14 a format class to define format instances, each format instance having a list
15 of properties to be displayed through an alias instance;

16 a property class to define property instances, each property instance
17 representing a property from a property list;

18 a connection class to define connection instances, each connection instance
19 representing connection parameters used by an alias instance to establish a
20 connection to the target schema object model;

21 a qualifier class to define qualifier instances, each qualifier instance
22 representing constraints on elements of an alias instance;

23 a localized string class to define localized string instances, each localized
24 string instance representing a text localization for translating text into a localized
25 language; and

1 a see-also association to associate an alias instance with other related alias
2 instances.

3

4 24. (Previously Amended) A management application embodied in one
5 or more computer-readable storage media, the management application
6 comprising:

7 a first object model to control configuration and behavior of the
8 management application in operating against and managing an operating system of
9 a second object model operating on at least one selected target system accessible
10 over a network, the first object model including:

11 a set of commands for directing the configuration and the behavior
12 of the management application; and

13 a command schema defining a mapping between the set of
14 commands and instructions understandable by the second object model; and

15 an interactive interface configured to receive the set of commands from a
16 user at a management station, wherein the interactive interface includes at least
17 one of:

18 a command line interface utility configured to allow the user to
19 formulate an instant command and receive textual entry of the user command; and

20 a graphical user interface utility.

21

22 25. (Original) A management application as recited in claim 24, wherein
23 the first object model comprises:

24 an alias class to define alias instances, each alias instance representing a
25 command used by the management application;

1 a verb class to define verb instances, each verb instance representing
2 behavior available through an alias instance;
3 a parameter class to define parameters accepted by a verb instance;
4 a format class to define format instances, each format instance having a list
5 of properties to be displayed through an alias instance;
6 a property class to define property instances, each property instance
7 representing a property from a property list;
8 a connection class to define connection instances, each connection instance
9 representing connection parameters used by an alias instance to establish a
10 connection to the second object model;
11 a qualifier class to define qualifier instances, each qualifier instance
12 representing constraints on elements of an alias instance;
13 a localized string class to define localized string instances, each localized
14 string instance representing a text localization for translating text into a localized
15 language; and
16 a see-also association to associate an alias instance with other related alias
17 instances.

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19 26. (Original) A management application as recited in claim 24, wherein
20 the second object model comprises a WMI object model.

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22 27. (Currently Amended) A computer-implemented method comprising:
23 receiving a command from a user that was formulated as an instant request
24 by the user at a management station through an interactive command line
25 interface;

1 fetching an alias for the command, wherein the alias is an instance of an
2 alias class and is the primary class in a command schema, and wherein the
3 command schema additionally includes:

4 a verb class to define verb instances, each verb instance representing
5 behavior available through an alias;

6 a parameter class to define parameters accepted by a verb instance;
7 a format class to define format instances, each format instance
8 having a list of properties to be displayed through an alias;

9 a property class to define property instances, each property instance
10 representing a property from a property list;

11 a connection class to define connection instances, each connection
12 instance representing connection parameters used by an alias to establish a
13 connection to the target namespace;

14 a qualifier class to define qualifier instances, each qualifier instance
15 representing constraints on elements of an alias;

16 a localized string class to define localized string instances, each
17 localized string instance representing a text localization for translating text
18 into a localized language; and

19 a see-also association to associate an alias with other related aliases;
20 interpreting the command based on the alias and the current operating
21 environment of the command line interface;

22 executing the command as one or more WMI API calls against a targeted
23 namespace representing at least one selected target system that is accessible via a
24 network;

25 receiving WMI data in XML form;

1 applying an XSL style sheet format the WMI data; and
2 presenting the WMI data through the command line interface.

3

4 28. (Canceled).

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6 29. (Currently Amended) A method as recited in claim [[28]] 27,
7 wherein the alias and the current operating environment are determined by
8 command entries to the command line interface.

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10 30. (Canceled).

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12 31. (Canceled).

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14 32. (Original) One or more computer-readable media storing computer-
15 executable instructions that, when executed on one or more processors, perform
16 the method of claim 27.

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18 33. (Currently Amended) A computer-implemented method of
19 managing objects in a target schema comprising:

20 providing an interactive user interface configured to allow a user to
21 formulate a set including one or more instant commands operable to receive
22 management information and initiate a management service and receive the
23 commands from the user;

24 defining a command structure through an object-oriented command
25 schema, the command schema including an alias class comprising:

1 an alias class which defines a command template, each alias of the
2 alias class representing a single command;

3 a verb class as a subclass to the alias class, each instance of the verb
4 class representing a behavior available through an alias;

5 a format class as a subclass to the alias class, each instance of the
6 format class representing a list of properties that will be returned through
7 processing an alias; and

8 a connection class as a subclass to the alias class, each instance of
9 the connection class providing parameters used through an alias when
10 establishing a connection to a target namespace within the target schema;

11 instantiating an object of the alias class as an alias by receiving parameters
12 of the alias class via the commands received from the user through the user
13 interface, the alias representing a command which maps to an object in the target
14 schema maintained on at least one selected target system accessible via a network
15 configured to at least one of retrieve management information and initiate a
16 management service; and

17 executing the command against the object in the target schema of the at
18 least one selected target system.

19
20 34. (Previously Presented) A computer-implemented method as recited
21 in claim 33, further comprising:

22 receiving data related to the object in the target schema in XML form;
23 retrieving an XSL file from a location defined through the alias;
24 formatting the data for display by applying an XSL style sheet from the
25 XSL file; and

- 1 displaying the data through the user interface.
- 2
- 3 35. (Previously Presented) A computer-implemented method as recited
- 4 in claim 33, wherein the user interface is a command line user interface.
- 5
- 6 36. (Previously Presented) A computer-implemented method as recited
- 7 in claim 33, wherein the user interface is a graphical user interface.
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- 9 37. (Previously Presented) One or more computer-readable media
- 10 storing computer-executable instructions that, when executed on one or more
- 11 processors, perform the computer-implemented method of claim 33.
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